

# Community Air Monitoring Workshop: Air Quality Priority: Diesel Mobile Sources

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## Purpose of This Document

- Summarize the Eastern Coachella Valley (ECV) Community Steering Committee (CSC) air quality concerns;
- Provide information on parts of the Community Air Monitoring Plan (CAMP), describing air monitoring strategies aimed at addressing air quality concerns from diesel mobile sources;
- Gather feedback from the CSC

## Community Concerns (CC)

The ECV CSC has expressed the following concerns regarding issues about diesel mobile sources that may negatively impact air quality and the life of local community members:

- CC-1 CSC members are concerned about the health effects experienced due to diesel emissions from mobile sources in ECV.
- CC-2 CSC members expressed concerns about truck idling near Mecca.
- CC-3 CSC members expressed concerns about emissions from heavy-duty agricultural equipment, freight trains, and school buses.
- CC-4 CSC members expressed concerns about trucks and school buses that often transit near sensitive receptors (e.g., schools and hospitals).

## Proposed Air Monitoring Strategies to Address Diesel Mobile Sources

Below are potential strategies and actions to address CSC concerns about emissions from diesel mobile sources.

Goals	Proposed Air Monitoring Strategies	Current Air Monitoring Activities	Seeking CSC Input
Improve monitoring networks	<ul style="list-style-type: none"> <li>Identify opportunities to expand the current South Coast AQMD's monitoring network in the ECV to:               <ul style="list-style-type: none"> <li>Add a black carbon monitor and provide data in real-time</li> <li>Help track emissions from truck traffic to better understand the impact of diesel emissions in ECV</li> <li>Track the progress of emission reduction strategies</li> <li>If necessary, conduct short-term black carbon monitoring where sensor data indicates high diesel emissions</li> </ul> </li> </ul> <p><b>Community Concern(s) addressed:</b> <b>CC-1, CC-2, CC-3, CC-4</b></p>	<ul style="list-style-type: none"> <li>South Coast AQMD currently operates one PM2.5 monitor at the Indio Air Monitoring Station.</li> <li>Data are available in near real-time at:               <ul style="list-style-type: none"> <li>AB 617 Data Display Tool: <a href="http://www.aqmd.gov/ab617-data-display-tool/ecv">http://www.aqmd.gov/ab617-data-display-tool/ecv</a></li> </ul> </li> <li>South Coast AQMD will pursue opportunities to augment a monitoring station with a black carbon monitor to better characterize emissions</li> </ul>	<ul style="list-style-type: none"> <li>Input on monitor locations and locations of high truck traffic, truck idling, and other potential sources of diesel emissions (e.g., agricultural equipment and bus routes)</li> <li>Input on pollutants of interest</li> <li>Input on timeline for expansion of the monitoring network</li> </ul>
	<ul style="list-style-type: none"> <li>Seek new opportunities and work with the CSC to deploy air quality sensors to:               <ul style="list-style-type: none"> <li>Provide real-time PM2.5 and NO<sub>2</sub> data</li> <li>Improve diesel emissions monitoring in the ECV, prioritizing areas where the</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>South Coast AQMD will begin sensor deployment as part of the implementation of the CAMP for this community.</li> <li>Calibration/correction techniques for air quality sensors are being investigated.</li> </ul>	<ul style="list-style-type: none"> <li>Input on sensor locations</li> <li>Input on size of sensor network (i.e., number of sensors)</li> <li>Input on CSC and/or community participation and hosting sensors</li> <li>Input on timeline for sensor deployment</li> <li>Input on data display</li> </ul>

	<p>public spends a significant amount of time (e.g., schools and residential areas) and areas close to sources of diesel emissions.</p> <ul style="list-style-type: none"> <li>○ Co-locate air quality sensors with reference monitors and develop a systematic data calibration and correction protocol to enhance air quality sensor data quality.</li> </ul> <p><b><i>Community Concern(s) addressed:</i></b>  <b><i>CC-1, CC-2, CC-3, CC-4</i></b></p>		
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## **Assembly Bill 617 (AB 617) Eastern Coachella Valley Community South Coast Air Quality Management District**

### **Input Gathering Worksheet for Monitoring Diesel Mobile Sources**

**Please provide any information and suggestions on potential air monitoring locations that may help us better characterize this air quality concern (e.g. locations with high truck traffic and idling trucks; agricultural equipment, bus routes and other potential sources of diesel emissions).**

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**Please provide information and suggestions on potential locations for sensor deployment. Feel free to include a list of community members who may be willing to host a sensor at their private residence (NOTE: each sensor will measure PM, NO2 and O3).**

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**Please provide any input you may have regarding other monitoring purposes and objectives for diesel mobile sources.**

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*Note: Information provided by you on this worksheet (including contact or other personal information) is a public record and may be released in response to a California Public Records Act request.*

## CAMP Subchapter on Diesel Mobile Sources

The CSC has expressed concerns about exposure to diesel emissions from several mobile sources and locations in the ECV community including heavy-duty trucks traveling along the State highways 111 and 86, school buses, and heavy-duty agricultural equipment (e.g., tractors and harvesting equipment). Diesel truck emissions are complex and are comprised of a variety of toxic gases and particles. Pollutants associated with diesel exhaust include PM<sub>2.5</sub>, and nitrogen dioxide (NO<sub>2</sub>). Diesel exhaust also contains the toxic air contaminant diesel particulate matter (DPM), which is a component PM<sub>2.5</sub>. DPM cannot be monitored directly but is estimated by measuring black carbon (BC or “soot”).

Two existing air monitoring stations (Indio station operated by the South Coast AQMD and 29 Palms monitoring station operated by Twenty-Nine Palms Band of Mission Indians) measure PM<sub>2.5</sub> within the community. The proposed monitoring strategy to address this priority consists of creating a sensor network that can measure PM<sub>2.5</sub> and NO<sub>2</sub>. South Coast AQMD staff will work with the CSC to effectively deploy these sensors at appropriate locations. This additional data will help quantify emissions from truck traffic to better understand the impact of diesel emissions in the community and to help track the effectiveness of emission reduction strategies outlined in the CERP. South Coast AQMD will also pursue opportunities to augment one of the existing or new monitoring stations with a stationary BC monitor. If necessary, short-term BC monitoring will be conducted at locations where sensor data indicate relatively high diesel emissions.